

In re Application of:

Chien et al.

Application No.: 10/705,791

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Page 2

PATENT

Attorney Docket No.: ST-UCSD3230-1
(formerly 041673-1202)

Amendments to the Claims:

Please cancel Claim 23. Claim 18 is amended. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-17. (Cancelled).

18. (Currently Amended) A method for treating ~~heart failure associated with the a~~ loss of cardiac muscle contractility associated with heart failure comprising:

delivering an expression construct to myocytes therein, wherein the expression construct provides an expressible polynucleotide encoding a phospholamban molecule having a single point mutation consisting of S16E or a double point mutation consisting of K3ER14E, wherein expression of the polynucleotide accelerates SERCA2 mediated calcium ion transport in the treated myocytes to improve cardiac muscle contractility by diminishing phospholamban inhibition of SERCA2 activity.

19. (Previously Presented) The method according to claim 18, wherein the expression construct is a viral vector.

20. (Cancelled).

21. (Cancelled).

22. (Cancelled).

23. (Cancelled)

24. (Previously Presented) The method according to claim 19, wherein the viral vector is a DNA vector.

25. (Withdrawn). The method as in claim 18, wherein the coding sequence is RNA.
26. (Withdrawn) A method for treatment of heart failure comprising:

delivery of a DNA construct to heart comprising a coding sequence for an antisense phospholamban RNA wherein transcription of the coding sequence is controlled by a promoter functional in heart and the antisense phospholamban RNA increases cardiac contractility or cardiac relaxation.
27. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered using a viral vector.
28. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by injection into the heart.
29. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by direct injection into the heart.
30. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by transcatheter injection into the heart.
31. (Withdrawn) The method as in claim 26, wherein the coding sequence is DNA.
32. (Cancelled)
33. (Cancelled)
34. (Cancelled)
35. (Cancelled)